

# Leviathan Mine Superfund Site

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • February 2017

## History and Timeline

### Background

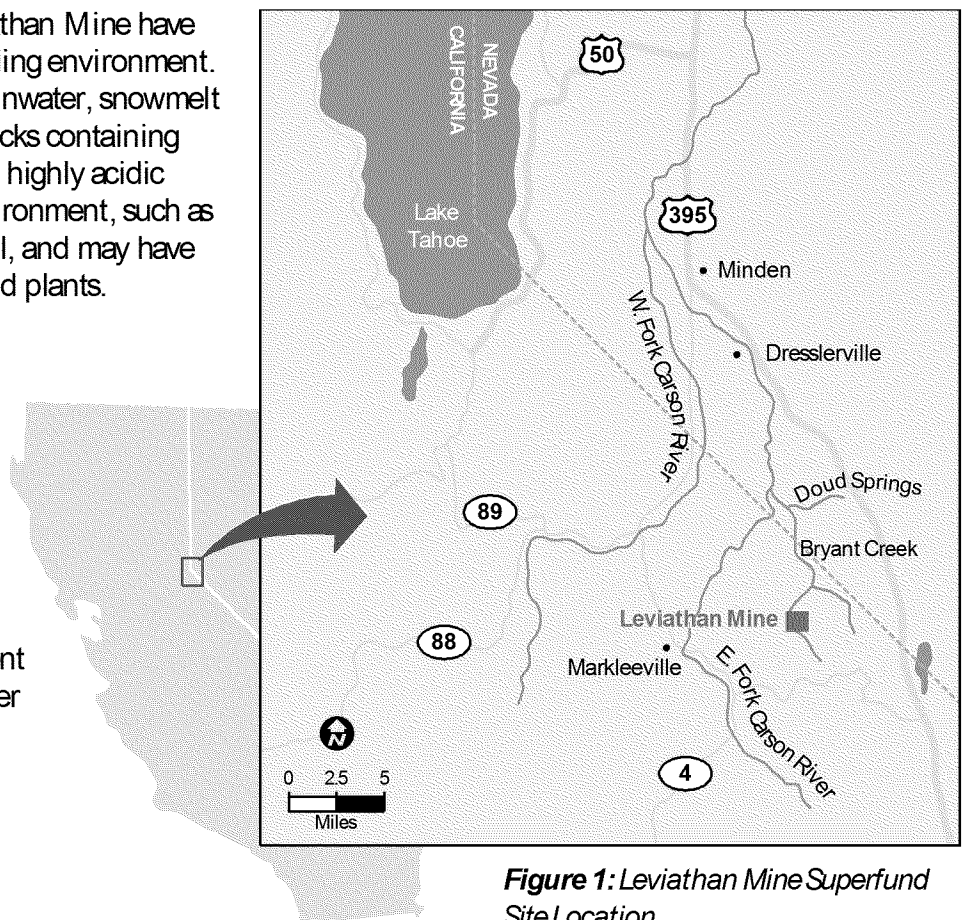
Leviathan Mine is an abandoned open-pit sulfur mine. The mine is located approximately 25 miles southeast of Lake Tahoe high on the eastern slope of the Sierra Nevada mountain range, in a remote portion of northeastern Alpine County, CA surrounded by national forest and private land. The acid mine drainage (AMD) from Leviathan Mine has historically contaminated a nine-mile stretch of the Leviathan-Bryant Creek watershed, impacting Leviathan, Aspen, and Bryant Creeks, as well as the East Fork Carson River. In 2000, the U.S. Environmental Protection Agency (EPA) added the mine and the impacted areas (the “Superfund site”) to the National Priorities List (NPL). The NPL is the list of the most complex, uncontrolled hazardous waste sites throughout the United States that threaten public health and the environment.

The historical activities from the Leviathan Mine have created AMD, impacting the surrounding environment. Sulfuric acid is created when water (rainwater, snowmelt and subsurface water) interacts with rocks containing sulfur-bearing minerals. The resulting highly acidic water moves into the surrounding environment, such as the groundwater, surface water and soil, and may have harmful effects on humans, animals and plants.

Although a long-term cleanup plan has not been developed, early cleanup activities are being conducted to reduce the discharge of untreated AMD. In the mid-1980s, the Pollution Abatement Project began which included re-grading the site, building evaporation ponds, and channeling the creek. Interim treatment systems have greatly improved the water quality of the Leviathan-Bryant Creek watershed.

#### Acid Mine Drainage (AMD)

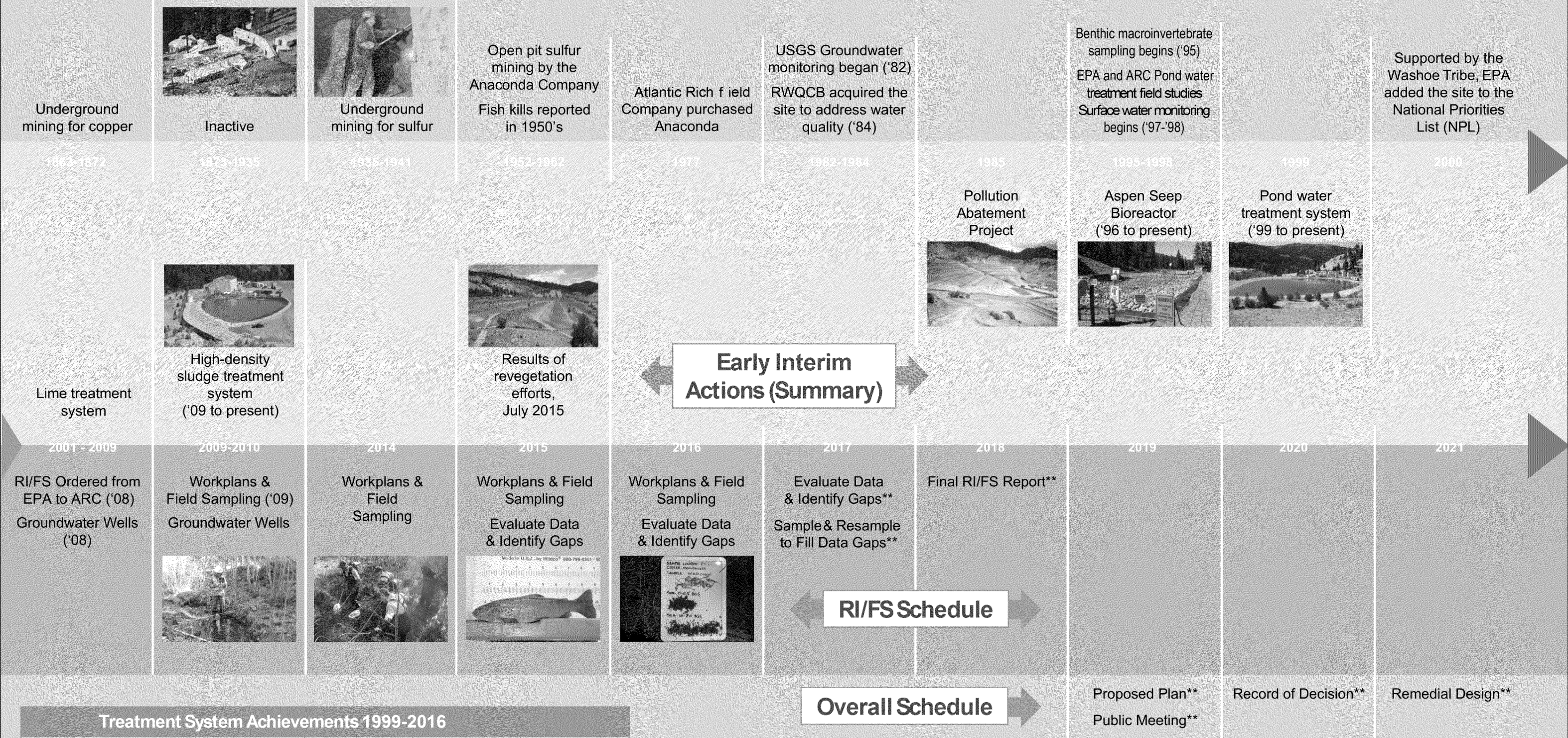
When highly acidic water that is rich in metals moves (or drains) out of a mined area into the environment



**Figure 1: Leviathan Mine Superfund Site Location**



# Timeline for the Leviathan Mine Superfund Site



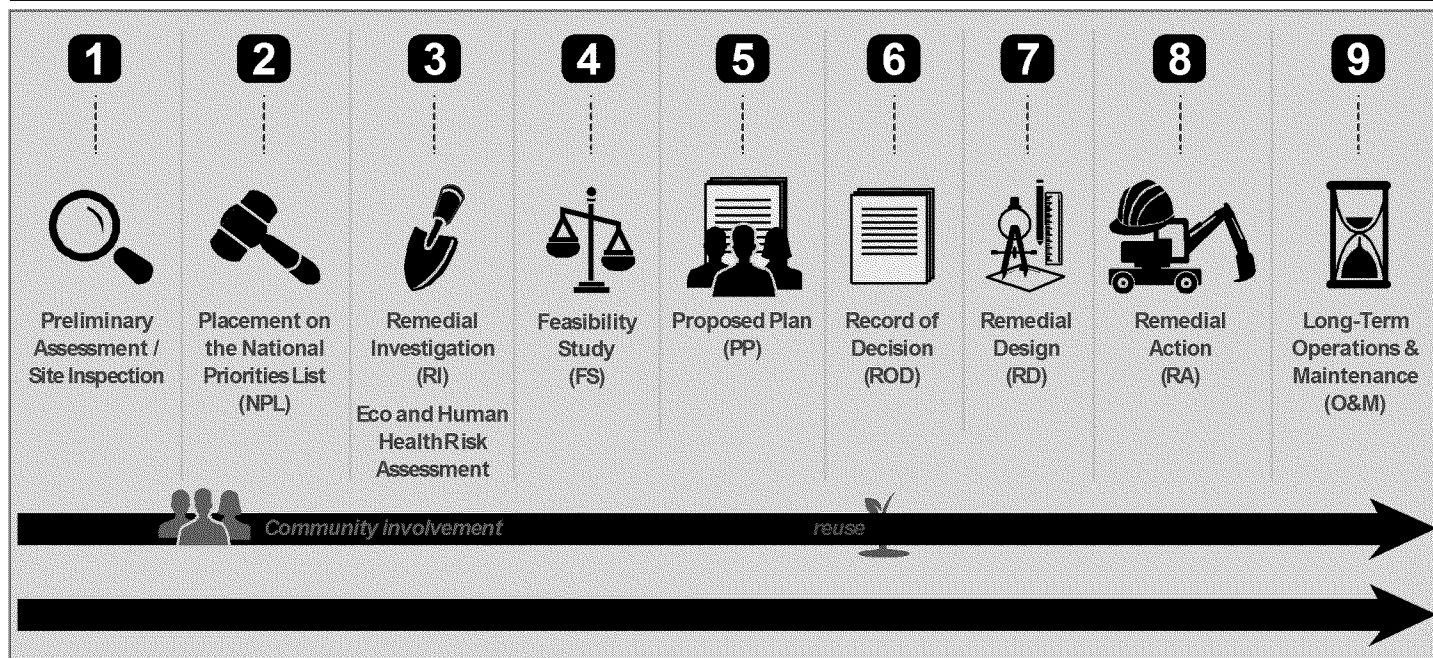
Treatment System Achievements 1999-2016				
	CA RWQCB	ARC	TOTAL	
Water Treated	107,480,000	137,672,000	245,152,000	Gallons
Aluminum Removed	405,337	43,606	448,943	Pounds
Arsenic Removed	5,500	267	5,767	Pounds
Iron Removed	592,284	219,856	812,140	Pounds
Nickel Removed	6,466	1,031	7,497	Pounds

Acronyms
RWQCB – California Regional Quality Control Board
USGS – United States Geological Survey
ARC – Atlantic Richfield Company
EPA – United States Environmental Protection Agency
RI/FS – Remedial Investigation/Feasibility Study

\*\*Proposed Schedule



# The Superfund Process



## Washoe Tribe of Nevada & California Role

EPA's Policy on Consultation and Coordination with Indian Tribes discusses EPA's responsibility to consult with tribes and consider their interests when taking action that may affect them or their resources. EPA works with the Washoe Tribe and provides funding through a cooperative agreement. The Washoe Tribe has given helpful comments on a number of site documents.

## For More Information

Visit one of the Information Repositories located at:

### Douglas County Library

1625 Library Lane  
Minden, NV 89423  
(775) 782-9841

### EPA Superfund Records Center

95 Hawthorne St., 4th Floor  
San Francisco, CA 94105  
(415) 536-2000

### Websites:

Leviathan Mine Superfund Site – <http://go.usa.gov/x9mf4>  
April 2015 Site Updates Fact Sheet – <http://go.usa.gov/x9mfZ>

Talk with one of the EPA or Washoe Tribe of Nevada & California representatives:

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Be included on the Leviathan Mine Superfund site mailing list by contacting Yolanda Sanchez.